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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/016,855	12/13/2001	Jimmy A. Tatum	V637-02310 US	7422

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EXAMINER

WOOD, KEVIN S

ART UNIT PAPER NUMBER

2874

DATE MAILED: 11/13/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/016,855	Applicant(s) TATUM, JIMMY A.	
	Examiner Kevin S Wood	Art Unit 2874	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 23-44 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 23-44 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>0803</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. This action is responsive to the Applicant's Amendment filed 12 September 2003. Claims 1-22 are now canceled and new claims 23-44 are now added. Claims 23-44 are pending in the application.

Election/Restrictions

2. The Restriction sent out by the examiner on 12 August 2003 is now moot, because claims 1-22 were canceled in the Applicant's Amendment filed on 12 September 2003.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 23-26, 28, 29, 33, 34, 36 and 38-42 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,425,695 to Murata et al.

Referring to claim 23, Murata et al. discloses all the limitations of the claimed method. Murata et al. discloses a method for the communication of data, the method

comprising the steps of: providing an optical interface (10) comprising at least two optical components (14,16) integrated into a common optical package; coupling communications equipment (142) together with the optical interface; and permitting bi-directional data communications between the communications equipment through the optical interface. See Fig. 1-11, along with their respective portions of the specification.

Referring to claims 24 and 25, Murata et al. discloses all the limitations of the claimed method. Murata et al. discloses that the communications equipment (142) may be a computer and a display. See Fig. 9, along with its respective portion of the specification.

Referring to claim 26, Murata et al. discloses all the limitations of the claimed method. Murata et al. discloses a method of providing an optical interface for enabling bi-directional communication, said method comprising the steps of: mounting at least two photonic components (214) onto a multi-element leadframe; and overmolding the at least two photonic components and the multi-element leadframe (213) with an encapsulant (228).

Referring to claim 28, Murata et al. discloses that the at least one photonic components comprises at least one photodetector.

Referring to claim 29, Murata et al. discloses a plurality of fibers (6). See the figures of the reference.

Referring to claim 33, Murata et al. discloses all the limitations of the claimed method. Murata et al. discloses a method for communication of data between a server and at least one client, the method comprising the steps of: providing an optical

interface in association with at least one of the server (142) and the client (142), wherein the optical interface further includes at least two photonic devices (14) integrated as a common optical package (10); coupling the optical interface to at least one fiber optic cable (16,112,140); and permitting data communications between the server and the at least one client through the interface. Murata et al. does not specifically state that the electronic instruments (142) are a server and a client. However, Murata et al. does disclose that the electronic instruments may be computers and data communications devices. It is inherent that if the interface disclosed by Murata et al. can be used to couple two computers, then one of those computers can act as a server while the other acts as a client.

Referring to claim 34, Murata et al. discloses all the limitations of the claimed invention. Murata et al. discloses a system for communicating data between a central processing unit (CPU) and a display unit, the system comprising: a first optical component package (146) comprising a first group of at least two electro-optical components electrically connected to the CPU (142); a second optical component package (146) comprising a second group of at least two electro-optical components electrically connected to the display unit (142); and at least one optical fiber (140) connecting the first optical component package and the second optical component package. See Fig. 1-11, along with their respective portions of the specification.

Referring to claim 36 and 38, Murata et al. discloses all the limitations of the claimed invention. Murata et al. discloses that at least one semiconductor laser and at

least one photodetector may be mounted on a multi-element leadframe (212) with a plastic overmolding (228) covering the multi-element leadframe.

Referring to claims 39 and 40, Murata et al. discloses that the optical component packages (10,146) include at least one lens (18).

Referring to claim 41 and 42, Murata et al. discloses that the encapsulant (28,228) acts as an alignment means in order to maintain the alignment tolerances between the plurality of optical fibers.

5. Claims 32 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,530,700 to Williams et al.

Referring to claim 32, Williams discloses all the limitations of the claimed method. Williams discloses a method for communication of data between a Central Processing Unit (CPU) and display monitor, the method comprising the steps of: providing a photonic package (5) containing at least one Vertical Cavity Surface Emitting Laser (VCSEL) (42); coupling the photonic package to at least one fiber optic ribbon cable (28); and permitting data communications between the computers. It is inherent that data communicated between a first computer to a second computer, through the fiber optic connector disclosed by Williams, can be communicated to the display of one of the computers.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 27, 30, 31, 35, 37, 43 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,425,695 to Murata et al.

Referring to claims 27 and 37, Murata et al. discloses all the claimed limitations, except Murata et al. does not specifically disclose that the surface emission lasers (14) are VCSELs. It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize VCSELs as the surface emitting lasers, since it was known in the art that VCSELs are efficient and reliable light sources.

Referring to claims 30 and 35, Murata et al. disclose all the limitations of the claimed invention, except Murata et al. does not disclose that the fiber bundle (112,140) is a plastic fiber ribbon. It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize an optical fiber ribbon as the optical fiber bundle since it was known in the art that fiber ribbons are specific type of fiber bundle that allows the individual fibers to be organized so that the each fiber is easy to identify.

Referring to claim 31, Murata et al. discloses all the limitations of the claimed invention, except Murata et al. does not disclose that the plurality of optical fibers have fiber core diameters between 500 microns and 1mm. It would have been obvious to

one having ordinary skill in the art at the time the invention was made to utilize any suitable size of optical fiber, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. In re Aller, 105 USPQ 233.

Referring to claim 43, Murata et al. discloses a system for communicating data between a server and at least one client through an optical fiber interface, the system comprising: at least two photonic devices (14) integrated within a common package (10) and including an alignment means, wherein at least one fiber bundle (112,140) plastic optical fiber can be optically aligned to the optical fiber interface via the alignment means (18), wherein data communications are permitted between the server and at least one client through the optical fiber interface such that the optical fiber interface provides a highly integrated and flexible high bandwidth communications package suitable for display data communications. See Fig. 1-11, along with their respective portions of the specification. Murata et al. does not disclose that the fiber bundle is a plastic fiber ribbon. It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize an optical fiber ribbon as the optical fiber bundle since it was known in the art that fiber ribbons are specific type of fiber bundle that allows the individual fibers to be organized so that the each fiber is easy to identify. Murata et al. does not specifically state that the electronic instruments (142) are a server and a client. However, Murata et al. does disclose that the electronic instruments may be computers and data communications devices. It is obvious that if

the interface disclosed by Murata et al. can be used to couple two computers, then one of those computers can act as a server while the other acts as a client.

Referring to claim 44, Murata et al. discloses that the photonic devices may include at least one laser and at least one photodetector, where the laser and photodetector is mounted on a multi-element leadframe (212) and overmolded with an encapsulant (228). See Fig. 10.

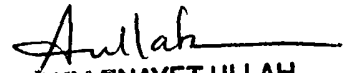
Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin S Wood whose telephone number is (703) 605-5296. The examiner can normally be reached on Monday-Thursday (7am - 5:30 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rodney B Bovernick can be reached on (703) 308-4819. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 307-0956.

KSW


AKM ENAYET ULLAH
PRIMARY EXAMINER